

In the Specification:

Please replace paragraph [0078] as follows:

[0078] Referring to Fig. 8, in the above mentioned embodiment of present invention, one electrode of the plane capacitor is connected with output end of the sine-wave signal generator 31; the other electrode of the plane capacitor is connected with input end of programme-controlled analog signal magnifier and filter circuit 32, the latter accepts programme control from micro processor 34 to conduct range self-adaptive adjustment, a sine-wave signal 35 generated by sine-wave signal generator 31 with a certain frequency will be reduced to sine-wave signal 37 after passing through plane capacitor, the signal 37 will be accepted by programme-controlled analog signal magnifier and filter circuit 32, and generate a DC voltage signal after being magnified and filtered, which will be converted to digital voltage signals via analog-to-digital conversion circuit 33 and be sent to micro-processor 34, the digital voltage signal will, after being digital filtered, digital linearized processed and digital self-adaptive arithmetic adjusted in micro processor 34, form digital output signals of the sensor and be delivered to bus line interface circuit 36 of shielded LIN (Local Interconnect Network) then, be delivered to control units of automatic wiper system through shielded LIN bus line cable 18.

When the wiper starts to work, this device continues to detect the surface of windshield and generate feedback signals to further control the wiper to work and for a close-loop control system, so as to enable the device to control the wiper working according to sizes of raindrops.

The testing signal of the present invention can also be square wave signal and triangle wave signal.

Please replace paragraph [0083] as follows:

[0083] Referring to Fig 8, in the above mentioned preferred embodiment of this invention, one electrode of the plane capacitor is connected with output end of the sine-wave generating circuit 31; the other electrode of the plane capacitor is connected with input end of programme-controlled analog signal magnifier and filter circuit 32; the latter accepts programme control from micro processor 34 to conduct range self-adaptive adjustment, sine-wave signal 35 generated by sine-wave generating circuit 31 with a certain frequency will be reduced to sine-wave signal 37 after passing through plane capacitor, the signal 37 will be accepted by programme-controlled analog signal magnifier and filter circuit 32, and generate a DC voltage signal after being magnified and filtered, which will be converted to digital voltage signals via an analog-to-digital conversion circuit 33 and be sent to micro-processor 34, the digital voltage signal will, after being digital filtered, digital linearized processed and digital self-adaptive arithmetic adjusted in micro processor 34, form digital output signals of the sensor and be transmitted to bus line interface circuit 36 of LIN (Local Interconnect Network), then, be delivered to control units of automatic demisting system through shielded LIN bus line cable 18. When the demisting system starts to work, this device continues to detect the surface of windshield and generate feedback signals to further control the demisting system to work and for a close-loop control system, so as to enable the device to control the demisting system to work according to fogging degree.